

Hydrogen Research & Innovation Days

24-25 November 2025



H2Haul Project Overview

Isobel Kaul

Isobel.kaul@erm.com

Sustainability is our business

We are the world’s largest pure play sustainability consultancy

Founded in 1971, we are the largest advisory firm in the world focusing solely on sustainability, offering unparalleled depth and breadth of expertise.

We shape a sustainable future with the world’s leading organizations

Our purpose guides everything we do. We create a better future by helping the world’s biggest brands address today’s sustainability imperatives.

We are the recognized market leader in sustainability services

Numerous industry benchmarks attest to our market leadership and the majority of our work is sole-sourced, reflecting trusted partnerships we build with our clients.

ERM OVERVIEW

8000+

Professionals

40

Countries &
territories

**ESG & Sustainability
consulting leader**

Verdantix Green
Quadrant 2024

150+

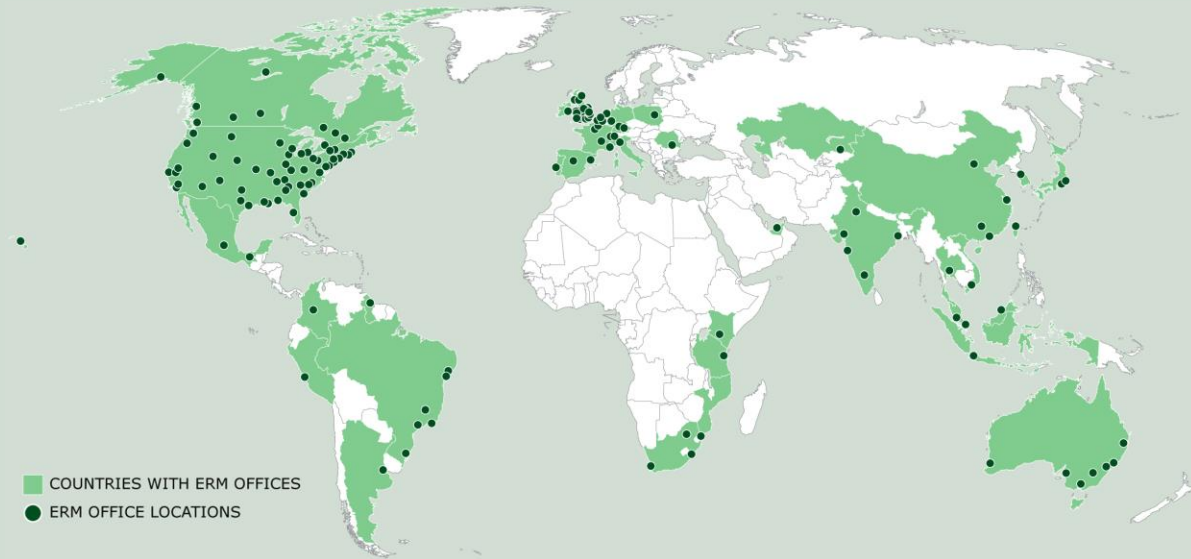
Offices

50+

Years of experience

#1

Sustainability service
provider – HFS 2022



We partner with...

70%

of Fortune 100

55%

of Fortune 500



H2Haul: deploying 16 heavy-duty trucks across four European countries



Objectives

- Develop **long-haul heavy-duty (26-44t) fuel cell trucks** that meet customers' requirements in a range of operating environments
- **Homologate** fuel cell trucks
- **Install hydrogen refuelling infrastructure** at each site and provide high reliability hydrogen supplies that maximise environmental benefits
- **Achieve >2 million kilometres** of day-to-day driving, proving the viability of the technology
- **Monitor the performance of the vehicles and infrastructure** to provide evidence on the availability, efficiency, and environmental benefits
- Develop the business case to **prepare the European market for further roll-out** of fuel cell trucks

Vehicle, component, and infrastructure suppliers



Coordination, dissemination & analysis



Observer Group





Progress to date:



Development of fuel cell truck specifications & designs



Functional prototype fuel cell systems integrated into the trucks for testing



Extensive **testing and validation activities** on prototype trucks



Final H2Haul truck construction, testing & homologation activities complete



Operation of **five hydrogen refuelling stations** across four countries



Operation of **13 trucks**, with **>140,000 kms** driven to date



IVECO S-eWAY Fuel Cell

- Total Mileage Status **105,805 kms**
- 9 out of 12 vehicles deployed and in operation across **Switzerland and Germany**
- **224kW BoL** (Bosch Twinbox) fuel cell system
- Up to **800km range** with less than 20 min refuelling time
- Approximately **221 fuelling events** since December 2024



MIGROS



hylane





VDL FCT 1 & 2

- Deployed with Colruyt logistics in **Q2 2025**
- Total mileage status **41,000kms** with Colruyt logistics
- Regional distribution in **western Belgium** with supermarket goods for Colruyt Lowest Prices grocery stores
- 4 × 50 kW PEM fuel cells (Supplier: OPmobility) with truck **range of 400-450 km** (batter + range extender)
- VDL FCEV 44t sufficient range **for 98% of Colruyt store deliveries**



Operating Schedule



6 trained drivers



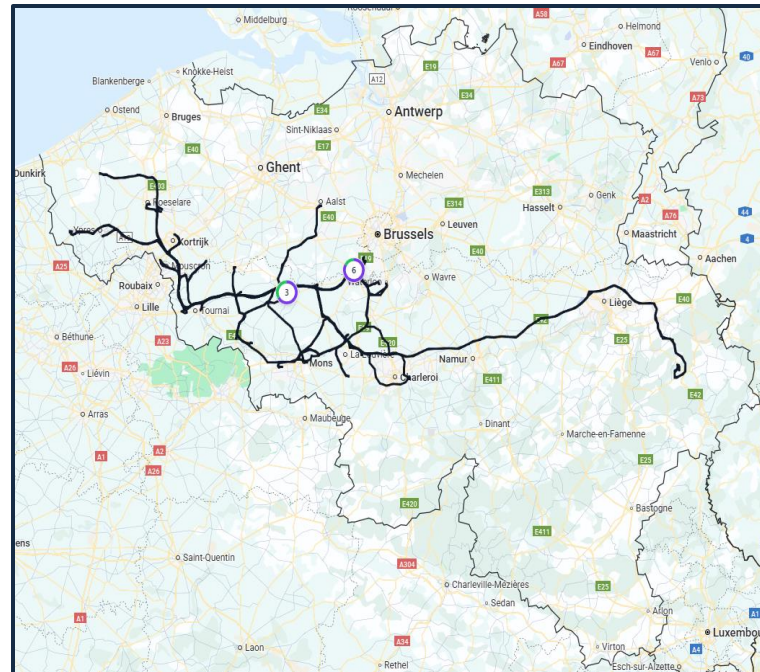
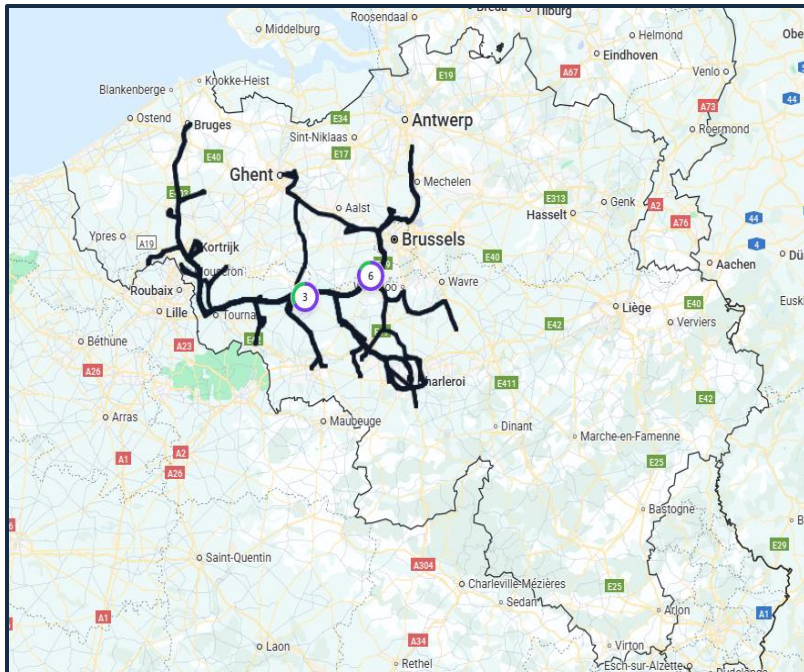
Driving from DC to
Colruyt Stores



6 days/week
2x 10h shift/day



Increased payload





All 4 H2Haul sites have operational heavy-duty hydrogen refuelling stations



Rothenburg

- ❑ In operation since **2021**, refuelling trucks at **350 bar**
- ❑ Average availability of **91.2%**
- ❑ Average refuelling mass of **16.9kg**

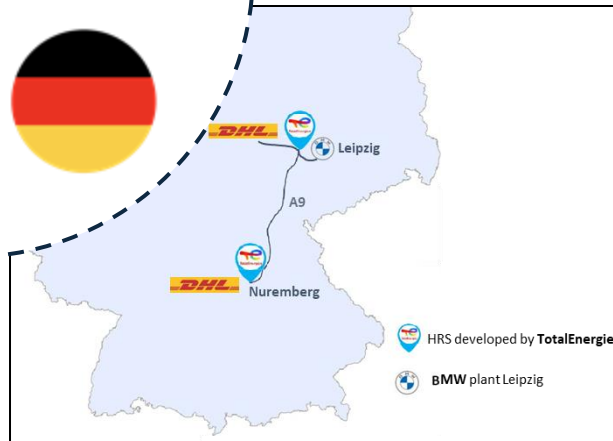


Fos-sur-Mer

- ❑ In operation for testing since **2023**
- ❑ Refuelling light and heavy-duty vehicles at **350 and 700 bar**
- ❑ Capacity of **1 ton/day**

Ollignies

- ❑ In operation since **2023**, refuelling trucks at **350 bar**
- ❑ Average availability of **93%**
- ❑ **1,709 kg** H2 total dispensed to project trucks so far



Nuremberg & Leipzig

In operation since **2025**, refuelling trucks at **700 bar**

Leipzig

- ❑ Availability **93.7%**
- ❑ Average refuelling mass: **48.97kg**

Nuremberg

- ❑ Availability **94.3%**
- ❑ Average refuelling mass **35.73kg**





Activities until the end of the project

Continued H2Haul truck operation and collection of operational data

Extensive analysis on operational data, including life cycle cost (LCC) and well-to-wheel (WTW) reports

Final project outputs including report on further deployment plans and commercialisation pathways

Dissemination to targeted stakeholder including dedicated Observer Group, dissemination to policy-makers and final H2Haul project event



Expected Impact & Further Developments

Direct emissions reduction for H2Haul trucks replacing diesel in four countries

Validation of hydrogen as a viable zero-emission alternative to diesel in everyday logistics operations

Analysis and reports to provide sectoral and policy recommendations for further roll-out across Europe

Collaboration across projects including the next generation of EU heavy-duty hydrogen truck projects, such as H2Accelerate TRUCKS



Co-funded by the
European Union

THE H2HAUL PROJECT HAS RECEIVED FUNDING FROM THE CLEAN HYDROGEN PARTNERSHIP
UNDER GRANT AGREEMENT NO 826836

THIS PROJECT IS SUPPORTED BY THE CLEAN HYDROGEN PARTNERSHIP AND ITS MEMBERS
HYDROGEN EUROPE AND HYDROGEN EUROPE RESEARCH

